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EXAMINER

SMALL, NAOMI J

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/550,821	<b>Applicant(s)</b> THOMPSON, MILTON	
	<b>Examiner</b> NAOMI SMALL	<b>Art Unit</b> 4147	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 31-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 23 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20050923</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to because the figures fail to contain descriptive labels for each item numbered. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains the legal phraseology "comprises". Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: the words "authorise", "characterise", etc. are spelled with an "s" instead of a "z". The word "travelled" is spelled with two "l"'s instead of only one. All spelling and grammar needs to be checked and corrected as appropriate.

Appropriate correction is required.

Claims 31-60 are objected to because of the following informalities: multiple spelling and grammar errors. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 34-35 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 34, Applicant describes *an authorisation system as claimed in claim 33 for use with moveable apparatus capable of being carried by, and susceptible of being taken from the possession of the authorised user wherein the acceleration responsive means comprises pedometer means operable to recognise movement steps of the carrier of the apparatus and to compute from a number of recognised steps at least an approximate distance travelled by the apparatus.*

It is unclear as to how the distance traveled by the vehicle can be correlated to the number of steps taken by the user if, as described by Applicant, the vehicle is taken in a carjacking situation, which means the vehicle is traveling away from the user.

As per claim 35, Applicant describes *an authorisation system as claimed in claim 34 in which the pedometer means includes calibration means arranged to calibrate the*

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*pedometer to the stride pattern of the authorised user and the apparatus includes means to provide to the authorised user on demand distance travelled by apparatus carried by the authorised user during normal functioning of the apparatus.*

It is unclear as to how the apparatus is to be carried by the user, when it is described in the specification that the apparatus is the vehicle.

*As per claim 42, an authorisation system as claimed in claim 31 in which the apparatus part is operable in the delaying interval to effect temporary or permanent inhibition of multiple functional aspects of the apparatus during said delaying interval to disguise responsibility of any particular functional aspect for non-functioning of the apparatus.*

Clarification is needed for the way in which “multiple functional aspects of the apparatus during said delaying interval to disguise responsibility of any particular functional aspect for non-functioning of the apparatus.”

2. Claims 32-36 recite the limitation "moveable apparatus". There is insufficient antecedent basis for this limitation in the claim.

3. Claims 34-35 recite the limitation "the carrier". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 31-33, 36-44, 47, 50-53, 55, and 57-59 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Winner, Jr. et al. (US Patent No. 6,400,042 B1).

As per claim 31, Winner, Jr. discloses *an authorisation system for permitting apparatus functional under the control of an operator to function normally only in the presence of an authorised user, comprising complementary parts of wireless communication means arranged to be carried in operation by the apparatus and an authorised user of the apparatus and operable to effect, within a spatial envelope defining a predetermined permissible working relationship between the authorised user and the apparatus, a communication link defined by continual transfer with reference to a temporal envelope of identifying information pairing the authorised user and the apparatus, said communication means being responsive to existence of said link to effect authorisation of the apparatus permitting it to function normally under said operator control and to cessation of an existing link to functioning apparatus to inhibit normal functioning of the apparatus after a delaying interval representative of extended absence of the authorised user from the apparatus* (Winner, Jr., col. 1, lines 66-67 & col. 2, lines 1-12: "In accordance with one aspect of the present invention there is provided an anti-theft device for a motor vehicle, which device comprises a personal identification unit (PID) to be carried by an authorized operator of the motor vehicle.

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This personal identification device (PID) has means for identifying its location in the vicinity of the motor vehicle. In other words, the PID is used to indicate when an authorized operator is in the vicinity of the vehicle. The present invention further includes a vehicle control unit mounted onto the motor vehicle so that the vehicle control unit can be shifted between a first condition and a second condition. The first condition will allow operation of the motor vehicle, whereas the second condition will inhibit operation of the motor vehicle. In accordance with this aspect of the invention, the control unit on the vehicle is shifted into the second, or inhibiting, mode of operation at a time subsequent to removal of the PID from the vicinity of the motor vehicle.”; col. 2, line 49: “Vicinity means less than about 50 feet.”; col. 3, lines 52-62: “In accordance with this concept, the unique device is a transmitter for transmitting a coded signal to the vehicle while the transmitter is in the vicinity of the vehicle. In accordance with this aspect of the invention, the coded signal is transmitted periodically. In the preferred embodiment, the period of transmission of the coded signal from the transmitter, or PID, is 10.1 seconds. If the receiver does not receive a properly coded transmitted signal from an authorized transmitter within 2.0 minutes, a monitoring reset timer or timer sequence of a microprocessor times out and shifts the system from a first condition allowing operation of the vehicle to a second condition inhibiting operation of the vehicle.”).

As per claim 32, Winner, Jr. discloses *an authorisation system as claimed in claim 31 adapted for use with moveable apparatus susceptible to being taken from the possession of the authorised user whilst functioning, in which the apparatus or the*



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*communication means includes means for measuring distance travelled and the communication means is operable to effect the delaying interval as a function of distance travelled by the apparatus* (Winner, Jr., col. 3, line 67 & col. 4, lines 1-10:

“Removal of the transmitter carried by the operator from the vicinity of the vehicle prevents operation of the vehicle. If the vehicle is being commandeered it can be operated for a period of time until the stall sequence has progressed to completely deactivate the ignition coil of the vehicle. By using this concept of a time delay as well as a stall function, the vehicle is driven away from the victim and shuts down at a location substantially removed from the crime scene. For this reason, the timer stage is set for approximately 2.0 minutes and the stall function occurs within approximately one minute. Since hijacking normally involves a speedy escape by the criminal element, this timing allows the vehicle to remove itself substantially from the victim and then shut down.”; col. 2, line 49: “Vicinity means less than about 50 feet.”).

As per claim 33, Winner, Jr. discloses *an authorisation system as claimed in claim 32 in which the in which the means for measuring distance comprises acceleration responsive means carried by the apparatus or the communication means responsive to movement of the apparatus or communication means to effect a determination of distance travelled by the apparatus at least during the delaying interval* (Winner, Jr., Fig. 2 & 10, col. 12, lines 39-43: “In connection with such a timer, stage 104 could be programmed to output the control signal through line 108 at the first

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occurrence of acceleration or deceleration of the vehicle through the preselected speed following input of the delayed out-of-range signal through line 84.”).

As per claim 36, Winner, Jr. discloses *an authorisation system as claimed in claim 31 adapted for use with moveable apparatus susceptible to being taken from the possession of the authorised user whilst functioning, in which the apparatus or the communication means includes means for measuring speed of the apparatus and at least one of the time and distance of travel of the apparatus and the communication means is operable to effect the delaying interval as a function of said speed and at least one of said time and distance of travel of the apparatus during the delaying interval* (Winner, Jr., col. 4, lines 22-39: “Preferably, the first control signal is that produced by the control unit as described above when the personal identification device carried by the authorized operator of the vehicle is removed from the vicinity of the vehicle as the latter is driven away by the hijacker, whereby the transmitter signal is no longer received by the control unit. In accordance with this aspect of the invention, however, the transmitter carried by the authorized operator could be manually operable, while still in range with respect to the vehicle, whereupon the receiver in the control unit would create the first control signal indicative of operator ejection. Further in accordance with this aspect of the invention, the rate of movement of the vehicle being hijacked is detected or sensed and, upon the occurrence of a predetermined or preselected condition regarding vehicle movement, the control unit on the vehicle responds to the

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two control signals and shifts into the second condition inhibiting operation of the vehicle.”).

As per claim 37, Winner, Jr. discloses *an authorisation system as claimed in claim 31 in which the apparatus or the communication means includes timing means and the communication means is operable to effect the delaying interval as a time delay* (Winner, Jr., Fig. 2, Item 70 and 10, col. 13, lines 64-67 & col. 14, lines 1-5: “In conjunction with a hijacking of the vehicle from the operator, assuming the control unit to be in the condition enabling operation of the vehicle, the authorized operator would push the transmitter button as the vehicle is driven away producing a control signal corresponding to the out-of-range signal produced when the passive transmitter is separated from the vehicle and which control signal would cause the logic “1” signal from microprocessor stage 80 through line 84 to stage 104.”).

As per claim 38, Winner, Jr. discloses *an authorisation system as claimed in claim 31 wherein the apparatus is embodied in a vehicle having a cab and an engine, said cab being normally occupied by a driver, and wherein the spatial envelope is substantially co-extensive with the cab, and the apparatus part is arranged to form a communication link with a user part carried by the driver and to be operably coupled to the vehicle engine to authorise or inhibit functioning of the vehicle engine by the driver* (Winner, Jr., col. 1, lines 66-67 & col. 2, lines 1-12: “In accordance with one aspect of the present invention there is provided an anti-theft device for a motor vehicle, which

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device comprises a personal identification unit (PID) to be carried by an authorized operator of the motor vehicle. This personal identification device (PID) has means for identifying its location in the vicinity of the motor vehicle. In other words, the PID is used to indicate when an authorized operator is in the vicinity of the vehicle. The present invention further includes a vehicle control unit mounted onto the motor vehicle so that the vehicle control unit can be shifted between a first condition and a second condition. The first condition will allow operation of the motor vehicle, whereas the second condition will inhibit operation of the motor vehicle. In accordance with this aspect of the invention, the control unit on the vehicle is shifted into the second, or inhibiting, mode of operation at a time subsequent to removal of the PID from the vicinity of the motor vehicle.”; col. 3, lines 15-23: “In accordance with a practical embodiment of the stall sequence system of the present invention, following the time delay after removal of the PID from the vehicle, the ignition coil is first deactivated for about 65 ms. Thereafter, the ignition coil is activated for 10.0 seconds. The stall sequence cycles between coil off and coil on. The first time, i.e. the time of coil deactivation or off, is gradually increased in the subsequent stall sequence. The time of activation, when the ignition coil is connected to the battery and on, is progressively decreased. By increasing the first time and decreasing the second time alternately, ultimately the first time prevails and the vehicle is inhibited.”).

As per claim 39, Winner, Jr. discloses *an authorisation system as claimed in claim 38 wherein the apparatus or the communication means is arranged to be operably*

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*coupled to the vehicle engine to authorise the vehicle to travel at any speed demanded by the driver or to inhibit the vehicle from travelling in excess of a speed set by the system at the end of the delaying interval* (Winner, Jr., col. 12, lines 50-63: "At the same time, selectivity with respect to the speed condition necessary for generating the second control signal advantageously enables providing for the inhibiting operation to take place after the hijacker is sufficiently removed from the vicinity of the hijacking operation, thus to protect the vehicle owner by enabling the latter to evacuate the hijacking location. Any number of rate-of-movement conditions can be selected for controlling issuance of the second control signal such as, for example, the first time the vehicle decelerates through a preselected rate of movement, such as 5 mph, the second time the vehicle accelerates through the preselected rate of movement, or a predetermined one of a plurality of successive accelerations and decelerations through the preselected rate of movement.").

As per claim 40, Winner, Jr. discloses *an authorisation system as claimed in claim 39 in which the apparatus or communication means part includes means for deriving a speed function related to any speed achieved during the delaying interval and at the end of the delaying interval to inhibit the vehicle from exceeding a speed that is a fraction of any speed represented by said speed function* (Winner, Jr., col. 3, line 67-col. 4, lines 1-10: "Removal of the transmitter carried by the operator from the vicinity of the vehicle prevents operation of the vehicle. If the vehicle is being commandeered it can be operated for a period of time until the stall sequence has progressed to

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completely deactivate the ignition coil of the vehicle. By using this concept of a time delay as well as a stall function, the vehicle is driven away from the victim and shuts down at a location substantially removed from the crime scene. For this reason, the timer stage is set for approximately 2.0 minutes and the stall function occurs within approximately one minute.”; col. 4, lines 32-42: “Further in accordance with this aspect of the invention, the rate of movement of the vehicle being hijacked is detected or sensed and, upon the occurrence of a predetermined or preselected condition regarding vehicle movement, the control unit on the vehicle responds to the two control signals and shifts into the second condition inhibiting operation of the vehicle. This advantageously enables providing for inhibiting of the vehicle to take place at a low speed of movement thereof, preferably less than 10 miles per hour and, for example, at about 5 miles per hour.”).

As per claim 41, Winner, Jr. discloses *an authorisation system as claimed in claim 31 adapted for permitting use of apparatus comprising a vehicle having its engine supplied with fuel by way of a fuel delivery system and the apparatus part of the system is arranged to be operably coupled to the vehicle to authorise or inhibit delivery of fuel to the engine and to effect said inhibition of normal functioning after a said delaying interval by progressively reducing the delivery of fuel to the engine during said interval* (Winner, Jr., col. 3, line 67- col. 4, lines 1-10: “Removal of the transmitter carried by the operator from the vicinity of the vehicle prevents operation of the vehicle. If the vehicle is being commandeered it can be operated for a period of time until the stall sequence

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has progressed to completely deactivate the ignition coil of the vehicle. By using this concept of a time delay as well as a stall function, the vehicle is driven away from the victim and shuts down at a location substantially removed from the crime scene. For this reason, the timer stage is set for approximately 2.0 minutes and the stall function occurs within approximately one minute.”).

As per claim 42, Winner, Jr. discloses *an authorisation system as claimed in claim 31 in which the apparatus part is operable in the delaying interval to effect temporary or permanent inhibition of multiple functional aspects of the apparatus during said delaying interval to disguise responsibility of any particular functional aspect for non-functioning of the apparatus* (Winner, Jr., col. 8, lines 49-67- col. 9, lines 1-14: “The present invention is particularly applicable for preventing hijacking of a vehicle by stalling the vehicle at a remote location from the actual hijacking location. Of course, when the vehicle is parked and the operator leaves the vehicle, the personal identification device or transmitter T is removed. This causes unit 10 to shut down the motor vehicle in the parked unattended condition. Consequently, device 10 also performs an anti-theft prevention function. It is possible to use unit 10 to operate auxiliary components. This can be combined with a device for sensing whether the alternator is operating to know whether the vehicle is operating or parked. In normal entry, the transmitter signal is received by unit 10 and the alternator is off. In this instance, an auxiliary system is employed for unlocking the doors and enabling the ignition system by unit 10. If the vehicle is being driven the transmitter in the vehicle

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and the alternator is operating. Thus, device 10 enables and maintains the ignition system as illustrated in FIG. 2. When the person exits the vehicle, the PID or transmitter is removed. The alternator had been operating; therefore, after two minutes, the ignition is progressively shut down in accordance with the stall sequence of FIG. 3. It is possible to apply auxiliary accessories to lock the doors in this situation. If the automobile is hijacked, which indicates a removal of the transmitter while the alternator is operating, the vehicle waits for two minutes before it is stalled in accordance with the sequence of FIG. 3. Since the transmitter is still gone, remotely connected accessory components can be used to lock the doors, close the windows and, after the stall sequence has been implemented, disconnect the main light switch, raise the head light door, pulse the lights, and pulse a siren to signal the fact that this vehicle is being operated by someone not authorized.”).

As per claim 43, Winner, Jr. discloses *an authorisation system as claimed in claim 31 adapted for use with apparatus in which operation of the apparatus is initiated by the operator prior to effecting control of functioning thereof, characterised in that the apparatus part is responsive to initiation of operation of the apparatus by the operator to initiate establishment of the communication link prior to, or contemporaneously with, functioning of the apparatus* (Winner, Jr., col. 2, lines 3-19: “This personal identification device (PID) has means for identifying its location in the vicinity of the motor vehicle. In other words, the PID is used to indicate when an authorized operator is in the vicinity of the vehicle. The present invention further includes a vehicle control unit mounted onto



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the motor vehicle so that the vehicle control unit can be shifted between a first condition and a second condition. The first condition will allow operation of the motor vehicle, whereas the second condition will inhibit operation of the motor vehicle. In accordance with this aspect of the invention, the control unit on the vehicle is shifted into the second, or inhibiting, mode of operation at a time subsequent to removal of the PID from the vicinity of the motor vehicle. In this manner, as the PID is carried by the authorized operator of the vehicle, the vehicle mounted control unit shifts to a first condition as the operator approaches the vehicle.”).

As per claim 44, Winner, Jr. discloses *an authorisation system as claimed in claim 31 in which the communication means comprises user transmission means carried by the user part and apparatus reception means carried by the apparatus part, having therein means to produce an identity reference unique to the pair, the user transmission means being operable to transmit radiation modulated in accordance with said identity reference and the apparatus reception means being responsive to receipt of said modulated radiation to confirm by transfer of identifying information including said identity reference existence of a communication link between them* (Winner, Jr., col. 2, lines 52-63: “In accordance with another aspect of the present invention, the personal identification device, or unit, is a small transmitter carried by an authorized operator of the motor vehicle. The transmitter has means for periodically transmitting an electromagnetic signal having a series of coded pulses, which arrangement of pulses is unique to the particular transmitter. The transmitter identifies an authorized operator

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of the vehicle. The control unit mounted onto the vehicle includes a receiver that has a decoding network for recognizing the unique coded pattern of the signal from the transmitter carried with the authorized operator of the vehicle.”).

As per claim 47, Winner, Jr. discloses *an authorisation system as claimed in claim 44 in which said modulation of the transmitted radiation is in accordance with a digital code and in which the communication means is arranged to change at least the carrier frequency of the modulated radiation in accordance with a digital code during communication* (Winner, Jr., col. 10, lines 15-23: “The coded signal is directed through line 306a to the antenna driver isolator 308 so that each 10.1 seconds an electromagnetic coded signal unique to transmitter T is transmitted from antenna 310, illustrated in FIG. 2 as antenna 50. To prevent radio interference, the signal on antenna 310 is provided with a carrier 312 having a frequency of 418 MHz. The resulting signal is a 100 kHz decoded serial signal with a 418 MHz carrier.”).

As per claim 50, Winner, Jr. discloses *an authorisation system as claimed in claim 31 in which the temporal envelope comprises at each of sequential communication intervals a time window of predetermined duration, the apparatus part being responsive to receipt of identifying information from the user part within each time window to provide authorisation of the apparatus until the next window and responsive to absence of identifying information to determine cessation of the communication link* (Winner, Jr., Fig. 7, col. 10, lines 9-13: “This pulse timer creates a signal in line 302a

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each 10.1 seconds. This signal is converted to the desired unique coded signal by encoder 304 to produce a series of binary signals which are directed to the 100 kHz oscillator 306.” ; col. 3, lines 56-62: “If the receiver does not receive a properly coded transmitted signal from an authorized transmitter within 2.0 minutes, a monitoring reset timer or timer sequence of a microprocessor times out and shifts the system from a first condition allowing operation of the vehicle to a second condition inhibiting operation of the vehicle.”).

As per claim 51, Winner, Jr. discloses *an authorisation system as claimed in claim 50 in which the apparatus part is responsive to the absence of receipt of identifying information within a predetermined number of consecutive time windows to determine cessation of the communication link* (Winner, Jr., col. 8, lines 16-31: “The stall sequence of stage 90 is schematically illustrated in FIG. 3 wherein a logic 1 in line 84 commences the sequence for stalling the vehicle gradually. At the first instance, block 120 creates a logic 0 in line 94. This occurs for 65.6 milliseconds. Such signal opens breaker 100 as shown in FIG. 2 for a very short period of time. Thereafter, a logic 1 appears in line 94 for 10.0 seconds. Thus, coil 14 can operate normally for 10 seconds. After 10 seconds, a logic 0 appears in block 120a for a time X.sub.1. This time is greater than 65.6 milliseconds. Thereafter, a logic 1 appears in line 94 causing coil 14 to be activated for 9.5 seconds. This sequence between block 120 and block 122 continues gradually increasing the time that the coil is inactive and gradually

decreasing the time when the coil is active, until reaching blocks 130, 132 where the logic 0 remains on line 94 and breaker 100 is maintained opened.”).

As per claim 52, Winner, Jr. discloses *an authorisation system as claimed in claim 50 in which the sequential communication intervals are contiguous* (Winner, Jr., Fig. 3, col. 8, lines 16-31: “The stall sequence of stage 90 is schematically illustrated in FIG. 3 wherein a logic 1 in line 84 commences the sequence for stalling the vehicle gradually. At the first instance, block 120 creates a logic 0 in line 94. This occurs for 65.6 milliseconds. Such signal opens breaker 100 as shown in FIG. 2 for a very short period of time. Thereafter, a logic 1 appears in line 94 for 10.0 seconds. Thus, coil 14 can operate normally for 10 seconds. After 10 seconds, a logic 0 appears in block 120a for a time X.sub.1. This time is greater than 65.6 milliseconds. Thereafter, a logic 1 appears in line 94 causing coil 14 to be activated for 9.5 seconds. This sequence between block 120 and block 122 continues gradually increasing the time that the coil is inactive and gradually decreasing the time when the coil is active, until reaching blocks 130, 132 where the logic 0 remains on line 94 and breaker 100 is maintained opened.”).

As per claim 53, Winner, Jr. discloses *an authorisation system as claimed in claim 31 in which the communication means includes a relay part arranged to be disposed, in respect of the communication link, between the user part and apparatus part and wherein at least the user part is arranged to transfer identifying information by way of the relay part in preference to establishing a communication link with the*

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*apparatus part directly* (Winner, col. 9, lines 34-52: "A decoder will create an output in one of the lines 200a, 202a, 204a or 206a according to the transmitter in the vicinity of unit 10. A key decoder 210 identifies the proper key K inserted into one of the key ports 220, 222, 224 or 226 as shown in FIGS. 1 and 5. Key K inserted into port 220 is first identified as a proper key by decoder 210. If the proper key is present, a signal light 230 is activated and a coded signal is received on line 240 from a particular one of the several transmitters or personal identification devices, as shown in FIG. 4. By using the proper key K an enable signal appears on one of the lines 250, 252, 254, 256 to enable one of the decoders 200-206. The enable lines condition the decoders for receipt of the next decoded signal and for setting of the decoder to that signal code. When the decoder has been programmed with a new code, light 230 is activated indicating that there has been a coding of the unit 10 to the particular transmitter in the vicinity of the motor vehicle. Unit 10 operates in accordance with the previous discussion.").

As per claim 55, Winner, Jr. discloses *an authorisation system as claimed in claim 53 in which the relay part is arranged to be carried by the user in operation* (Winner, Jr., col. 9, lines 37-39: "A key decoder 210 identifies the proper key K inserted into one of the key ports 220, 222, 224 or 226 as shown in FIGS. 1 and 5.").

As per claim 57, Winner, Jr. discloses *an authorisation system as claimed in claim 31 in which the user part comprises a plurality of physically discrete modules consisting of a master module operable to effect a said communication link with the*

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*apparatus part and at least one supplementary module operable to effect a communication link with the master module, each said supplementary module having associated therewith a specific functional feature of the functioning apparatus, said communication means being responsive to absence of a communication link between a said supplementary module and master module to inhibit function of said feature within the functioning apparatus* (Winner, Jr., col. 5, lines 17-21: "In accordance with another aspect of the present invention, the vehicle mounted control unit can be programmed to include more than one authorized PID transmitter. In addition, it can be used to operate windows, lights, sirens, and other accessories.").

As per claim 58, Winner, Jr. discloses *an authorisation system as claimed in claim 31 in which the user part comprises a plurality of physically discrete modules consisting of a master module operable to effect a said communication link with the apparatus part and at least one supplementary module operable to effect a supplementary communication link with the apparatus part, each said supplementary module having associated therewith a specific supplementary functional feature of the functioning apparatus not critical to its normal functioning, said communication means being responsive to absence of a communication link between a said supplementary module and the apparatus part to inhibit operation of the associated supplementary functional feature* (Winner, Jr., col. 5, lines 17-21: "In accordance with another aspect of the present invention, the vehicle mounted control unit can be programmed to include

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more than one authorized PID transmitter. In addition, it can be used to operate windows, lights, sirens, and other accessories.”).

As per claim 59, Winner, Jr. discloses *an authorisation system as claimed claim 31 in which the apparatus part of the communication means is arranged to be removably carried by the apparatus in functioning and includes apparatus operation initiation means operable to permit initial operation of the apparatus* (Winner, Jr., col. 2, lines 52-67: “In accordance with another aspect of the present invention, the personal identification device, or unit, is a small transmitter carried by an authorized operator of the motor vehicle. The transmitter has means for periodically transmitting an electromagnetic signal having a series of coded pulses, which arrangement of pulses is unique to the particular transmitter. The transmitter identifies an authorized operator of the vehicle. The control unit mounted onto the vehicle includes a receiver that has a decoding network for recognizing the unique coded pattern of the signal from the transmitter carried with the authorized operator of the vehicle. In this manner, as the operator approaches the vehicle, the coded signal is transmitted to the receiver on the vehicle. This signal shifts the control unit into the first condition. Consequently, the motor vehicle can be operated normally.”).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winner, Jr. (US Patent No. 6,400,042 B1) in view of Darley (US Patent No. 6,611,789 B).

As per claim 34, Winner, Jr. discloses *an authorisation system as claimed in claim 33 for use with moveable apparatus capable of being carried by, and susceptible of being taken from the possession of the authorised user.*

Winner, Jr. does not expressly disclose *wherein the acceleration responsive means comprises pedometer means operable to recognise movement steps of the carrier of the apparatus and to compute from a number of recognised steps at least an approximate distance travelled by the apparatus.*

Darley discloses *wherein the acceleration responsive means comprises pedometer means operable to recognise movement steps of the carrier of the apparatus and to compute from a number of recognised steps at least an approximate distance travelled by the apparatus* (Darley, col. 10, lines 36-49: "According to another aspect of the invention, a system includes at least one processor configured to, on a graph having foot contact times of a user on a first coordinate axis and paces of the user on a second coordinate axis, determine a location of a first point particular to the user, to identify a second point on the graph independent of the user, and to, based upon locations of the first and second points on the graph, define a curve on the graph that intercepts both of



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the first and second points, the at least one processor being further configured to calculate at least one of a pace of the user and a distance traveled by the user during an outing based upon at least one foot contact time determined during the outing and the defined curve.”).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify Winner, Jr.’s device with the pedometer device, as taught by Darley.

The motivation would be to improve Winner, Jr.’s device with the reasonable expectation that it would result in a device that allowed the user to have knowledge of the distance in which their vehicle has traveled away from them after it had been taken without the user’s authorization.

As per claim 35, Winner, Jr. in further view of Darley discloses *an authorisation system as claimed in claim 34 in which the pedometer means includes calibration means arranged to calibrate the pedometer to the stride pattern of the authorised user and the apparatus includes means to provide to the authorised user on demand distance travelled by apparatus carried by the authorised user during normal functioning of the apparatus* (Darley, col. 9, lines 64-67- col. 10, lines 1-7: “According to another aspect of the invention, a method includes steps of: (a) determining a single user-specific calibration constant that defines a relationship between foot contact times of a user and corresponding paces of the user, wherein no other user-specific calibration constants are used to define the relationship; and (b) calibrating at least one device that

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monitors activity of the user in locomotion on foot based upon the relationship between foot contact times of the user and corresponding paces of the user that is defined by the single user-specific calibration constant.”; col. 20, lines 63-67-col. 9, lines 1-2: “In one illustrative embodiment, the foot-mounted unit 102 accumulates and transmits data to the wrist-mounted unit 104 where it may be used to display, for example, the current pace (or speed) of the user 112, as well as the average pace (or speed) of the user 112, the energy (e.g., calories) expended by the user 112, and the total distance traveled by the user 112 during a particular time interval.”).

6. Claims 45-46 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winner, Jr. et al. (US Patent No. 6,400,042 B1) in view of Loeffler et al. (US Patent No. 5,1838,074).

As per claim 45, Winner, Jr. discloses *an authorisation system as claimed in claim 44.*

Winner, Jr. does not expressly disclose a system *in which the communication means further comprises apparatus transmission means in the apparatus part and user reception means in the user part arranged to effect bi-directional communications between the apparatus part and the user part and the user and apparatus parts each have therein means to produce a further identity reference unique to the pair, the apparatus transmission means being operable to transmit radiation modulated in accordance with said further identity reference and the user reception means being*

*responsive to receipt of said modulated radiation to confirm existence of a communication link between them.*

*Loeffler discloses a system in which the communication means further comprises apparatus transmission means in the apparatus part and user reception means in the user part arranged to effect bi-directional communications between the apparatus part and the user part and the user and apparatus parts each have therein means to produce a further identity reference unique to the pair, the apparatus transmission means being operable to transmit radiation modulated in accordance with said further identity reference and the user reception means being responsive to receipt of said modulated radiation to confirm existence of a communication link between them*

(Loeffler, col. 2, lines 46-67: "Referring now to the figures of the drawings in detail and first, particularly, to FIG. 1 thereof, there is seen an anti-theft system according to the invention which has a transceiver 1 disposed in a motor vehicle that cooperates with a portable transponder 2 through a transformer-type or inductive coupling when the transponder 2 is located in the vicinity of the transceiver 1. The transceiver 1 generates a magnetic alternating field, which oscillates at a predetermined frequency and by which a question code signal is transmitted to the transponder 2. The question code signal is a high-energy oscillation, with whose energy a charge capacitor 3 or a rechargeable battery in the transponder 2 is charged. If enough energy has been loaded into the charging capacitor 3 and the alternating field is turned off, then the transponder begins to oscillate, causing code signals to be transmitted back to the transceiver 1."; col. 1, lines 66-67-col. 2, lines 1-6: "In accordance with another feature of the invention, the

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transponder has a code generating unit storing a piece of code information or computation formula in memory and generating a code word from the code information or computation formula being transmitted back to the transceiver in the oscillation of the transponder oscillating circuit and amplitude-modulated as a function of the code information or computation formula.”).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Winner, Jr.’s device through implementing the functionality of both the user carried device and the vehicle mounted device being able to both receive and transmit, as taught by Loeffler.

The motivation would be to improve Winner, Jr.’s device with the reasonable expectation that it would result in a device that enable the devices to be passive in that “...a transceiver disposed in a motor vehicle; and a portable transponder; the transceiver having an oscillator, an oscillating circuit excited to oscillate at a predetermined first frequency by the oscillator, causing energy signals to be transmitted at a first frequency to the transponder when the transponder is disposed in the immediate vicinity of the transceiver; the transponder having a transponder oscillating circuit, an energy storing device charged by the energy signals for causing the transponder oscillating circuit to oscillate at its resonant frequency and transmit data signals at a resonant frequency back to the transceiver; the transceiver having a frequency counter receiving the data signals and measuring the resonant frequency; and the transceiver having a control unit connected to the frequency counter and to the oscillator for controlling the oscillator to excite the oscillating circuit with a second

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frequency approximately matching the measured resonant frequency.” (Loeffler, col. 1, lines 38-55)

As per claim 46, Winner, Jr. discloses *an authorisation system as claimed in claim 44.*

Winner, Jr. does not expressly disclose a system *in which said modulation is in accordance with a rolling digital code changed for each transmission.*

Loeffler discloses a system *in which said modulation is in accordance with a rolling digital code changed for each transmission* (Loeffler, col. 6, lines 27-30: “It is also possible, however, to use a so-called "changing code" or "rolling code". Then the code word transmitted to the transceiver 1 changes for each starting procedure.”).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Winner, Jr.'s device with the use of a system which implemented a "changing code" or "rolling code", as taught by Loeffler.

The motivation would be to improve Winner, Jr.'s device with the reasonable expectation that it would result in a device with greater security being that each time the code is transmitted, it is different. Therefore, the code is more difficult to be guessed by unauthorized users.

As per claim 49, Winner, Jr. discloses *an authorisation system as claimed in claim 44.*

Winner, Jr. does not expressly disclose a system *in which at least the identity reference is based upon generation of at least one random or pseudo-random number*.

Loeffler discloses a system *in which at least the identity reference is based upon generation of at least one random or pseudo-random number* (Loeffler, col. 3, lines 28-31: "To that end, the transceiver 1 transmits a random number, which together with a mathematical algorithm (computation formula) stored in memory in the transponder 2 is processed to make a new code word.").

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Winner, Jr.'s device through implementing the use of a random number generator, as taught by Loeffler.

The motivation would be to improve Winner, Jr.'s device with the reasonable expectation that it would result in a device that would utilize "Such mathematical methods are also known as crypto methods. In such methods, it is not possible to read out the memorized algorithms. The immobilizer cannot later be undone by eavesdropping on the dialog between the transceiver 1 and the transponder 2, since the code signals are different on each attempted start." (Loeffler, col. 3, lines 42-47).

7. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winner, Jr. et al. (US Patent No. 6,400,042 B1) in view of Suda et al. (US Patent No. 6,718,240 B1).

As per claim 48, Winner, Jr. discloses *an authorisation system as claimed in claim 47.*

Winner, Jr. does not expressly disclose a system *in which the communication means is arranged to effect a communication Link in accordance with the Bluetooth wireless specification.*

Suda discloses a system *in which the communication means is arranged to effect a communication Link in accordance with the Bluetooth wireless specification* (Suda, col. 4, lines 44-47: "The wireless transmitter 205 and receiver 215 may employ any wireless communication technology, including radio frequency (RF), infrared (IR), and BlueTooth.").

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Winner, Jr.'s device through the implementation of the wireless communication technology, Bluetooth, as taught by Suda.

The motivation would be to improve Winner, Jr.'s device with the reasonable expectation that it would result in a device that was able to be customized with any wireless communication technology that the user desired. "The wireless transmitter 205 and receiver 215 may employ any wireless communication technology, including radio frequency (RF), infrared (IR), and BlueTooth." (Suda, col. 4, lines 44-47)

8. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winner, Jr. et al. (US Patent No. 6,400,042 B1) in view of Blatz et al. (US Patent No. 6,970,679).

As per claim 54, Winner, Jr. discloses *an authorisation system as claimed in claim 53.*

Winner, Jr. does not expressly disclose a system *in which the communication means is arranged to attempt to establish a communication link including the relay part and in absence thereof to establish a communication like directly between the user part and the apparatus part.*

Werner discloses a system *in which the communication means is arranged to attempt to establish a communication link including the relay part and in absence thereof to establish a communication like directly between the user part and the apparatus part* (Blatz, col. 2, lines 61-67- col. 3, lines 1-2: "Throughout this specification, the terms "redirection" and "relaying" are used interchangeably to generally refer to any redirection, relaying, 1retransmission, repeating, or range-extension of the transmitted data communication, for example via an intermediate device such as a transceiver or radio amplifier relay station, contrary to a direct transmission between the first transmitting and receiving unit and the second (transmitting and) receiving unit without any intervening receiving and/or transmitting device.").

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Winner, Jr.'s device through the implementation of a relay device, as taught by Blatz.

The motivation would be to improve Winner, Jr.'s device with the reasonable expectation that it would result in a device that would "increase the difficulty of



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mimicking the data transmission characteristics and thereby carrying out an undetectable redirection or relaying of the data transmission.” (Blatz, col. 2, lines 32-35).

9. Claims 56 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winner, Jr. et al. (US Patent No. 6,400,042 B1) in view of Johnson (US Patent No. 5,986,543).

As per claim 56, Winner, Jr. discloses *an authorisation system as claimed in claim 53.*

Winner, Jr. does not expressly disclose a system *in which the relay part includes additional functional apparatus under the control of the authorised user and the relay part is arranged to effect in response to cessation of an existing communication link with the user part of the communication means during functioning of the additional apparatus inhibition of normal functioning after a delaying interval.*

Johnson discloses a system *in which the relay part includes additional functional apparatus under the control of the authorised user and the relay part is arranged to effect in response to cessation of an existing communication link with the user part of the communication means during functioning of the additional apparatus inhibition of normal functioning after a delaying interval* (Johnson, col. 27, lines 21-42: “The communications and control unit 201 is further operable to control devices located in other vehicles or in stationary objects such as in a home. Taking the example of controlling devices in a home as an example, a communications and control unit 201 is

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located in a persons home. The relay drivers 513a and 513b are then connected to relays for controlling appliances in the home, e.g., lights, garage doors, gates, air conditioning, heating and kitchen appliances. The cellular telephone transceiver unit is replaced by a telephone network connection. An occupant of a vehicle 200 can use the handset 211 to send a control command to the central monitoring station 103. A command available is to "transfer call" to a specified telephone number, which in this case is the occupant's home. The control and communications unit in the occupant's home answers the transferred call. By way of password codes, the authorization to communicate with the occupant's home is verified. The occupant of the vehicle 200 can then send commands to the control and communications unit in the occupant's home from the handset 211 in the occupant's vehicle." It would obvious to one of ordinary skill in the art that once communication begins with another apparatus, the communication with the first apparatus must be stopped).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Winner, Jr.'s device with the capability to be used with more than one vehicle, as taught by Johnson.

The motivation would be to improve Winner, Jr.'s device with the reasonable expectation that it would result in a device that would be able to send commands for a different vehicle at another location away from the location of the vehicle in which the user is occupying. (Johnson, col. 27, lines 21-42)

As per claim 60, Winner, Jr. discloses *an authorisation system as claimed in claim 31 for apparatus.*

Winner, Jr. does not expressly disclose a system *having a telephone communication ability, in which the apparatus part is operable during said delaying interval to effect a telephone call to a predetermined recipient.*

Johnson discloses a system *having a telephone communication ability, in which the apparatus part is operable during said delaying interval to effect a telephone call to a predetermined recipient* (Johnson, Fig. 7, col. 13, lines 51-54: "From the ALARM state 709 a call is made to the central monitoring station to report the event, e.g., an emergency, an intrusion detection zone violation, a carjacking, or an emergency vehicle request, action state 713.").

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Winner, Jr.'s device with a telephone communication capability, as taught by Johnson.

The motivation would be to improve Winner, Jr.'s device with the reasonable expectation that it would result in a device that was able to call for help in the event of an emergency situation. (Johnson, col. 13, lines 51-54)

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAOMI SMALL whose telephone number is (571)270-

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5184. The examiner can normally be reached on Monday-Thursday 7:30 am - 6:00 pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hai Tran can be reached on 571-272-7305. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. S./  
Examiner, Art Unit 4147

/George A Bugg/  
Primary Examiner, Art Unit 4147